## ABSTRACT OF THE DISCLOSURE

An automatic water filtration and purification system will allow a continuous water flow to downstream fixtures while simultaneously and automatically regularly flushing and cleaning in-path filter media. The automatic water filtration and purification system has at least one filter to remove impurities from a water in-path through-put. A cleaner is coupled to the at least one filter to clean the at least one filter. A controller is coupled to the at least one filter to regulate automatic operation of the cleaner wherein continuous operation of water flow to fixtures downstream of the at least one filter is essentially uninterrupted during the operation of the cleaner and the controller.